

**EXHIBIT B**

**Attorney Docket No. 1101-220**

**U.S. Application Serial No. 09/079,678**

**Pending Claims after Entry of March 28, 2001 Amendment**



31. (Amended) A method of delivering an active agent in vivo comprising administering to a subject a composition comprising a purified protein which specifically binds a gastro-intestinal tract receptor, which receptor is selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), wherein the purified protein is bound to a material comprising an active agent, said active agent being of value in the treatment of a mammalian disease or disorder.

32. (Amended) A method of delivering a drug to a subject comprising administering to the subject a composition comprising a purified protein which specifically binds a gastro-intestinal tract receptor, which receptor is selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), wherein the purified protein is bound to a material comprising an active agent of value in the treatment of a mammalian disease or disorder, and wherein said protein is covalently bound to a particle containing a drug.

33. A method of delivering a drug to a subject comprising administering to the subject a composition comprising a purified protein which specifically binds a gastro-intestinal tract receptor, which receptor is selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), wherein the purified protein is bound to a material comprising an active agent of value in the treatment of a mammalian disease or disorder, and wherein said protein is covalently bound to a drug.

34. The method according to claim 31 in which the administering is oral.

35. The method according to claim 31 in which the active agent is a drug.

36. The method according to claim 31 in which the subject is a human.

37. The method according to claim 35 in which the subject is a human.
38. The method according to claim 31 in which said composition facilitates the transport of the active agent through human or animal gastro-intestinal tissue.
39. The method according to claim 33 in which the administering is oral.
75. (Amended) A method of delivering a drug to a subject comprising administering to the subject a therapeutically effective amount of a pharmaceutical composition comprising a therapeutically effective amount of a nucleic acid encoding a chimeric protein comprising (i) a first protein comprising at least 6 contiguous amino acids of an amino acid sequence selected from the group consisting of SEQ ID NOS:1-55, said contiguous amino acids being capable of specifically binding to a gastro-intestinal tract receptor selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), said first protein being fused via a covalent bond to (ii) a second protein, said second protein being a drug; and a pharmaceutically acceptable carrier.
98. (New) The method of claim 31, in which the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NOS:1-55 or a binding portion thereof.
99. (New) The method of claim 31, in which the amino acid sequence of the protein is selected from the group consisting of SEQ ID NOS:1-55, or a binding portion thereof.
100. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Xaa<sub>1</sub> Thr Xaa<sub>2</sub> Xaa<sub>3</sub> Ser Xaa<sub>4</sub> Xaa<sub>5</sub> Xaa<sub>6</sub> Asn Xaa<sub>7</sub> Arg (SEQ ID NO:253), where Xaa<sub>1</sub> is Ser or Thr; Xaa<sub>2</sub> is Arg or Lys; Xaa<sub>3</sub> is Lys or Arg; Xaa<sub>4</sub> is Ser or Leu; Xaa<sub>5</sub> is Arg, Ile, Val, or Ser; Xaa<sub>6</sub> is Ser, Tyr, Phe, or His; and Xaa<sub>7</sub> is Pro, His or Arg.

101. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Asp Xaa<sub>1</sub> Asp Xaa<sub>2</sub> Arg Arg Xaa<sub>3</sub> Xaa<sub>4</sub> (SEQ ID NO:254) where Xaa<sub>1</sub> is Ser, Ala, or Gly; Xaa<sub>2</sub> is Val or Gln; Xaa<sub>3</sub> is Pro, Gly, or Ser; and Xaa<sub>4</sub> is Trp or Tyr.

102. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: Val Arg Ser Gly Cys Gly Xaa<sub>1</sub> Xaa<sub>2</sub> Ser Ser (SEQ ID NO:255), where Xaa<sub>1</sub> is Ala or Phe; and Xaa<sub>2</sub> is Arg or His.

103. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: NTRKSSRSNPR (SEQ ID NO:256) or STKRSLIYNHR (SEQ ID NO:257) or STGRKVFNRR (SEQ ID NO:258) or TNAKHSSHNR (SEQ ID NO:259).

104. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: DSDVRRPW (SEQ ID NO:260) or AADQRRGW (SEQ ID NO:261) or DGRGGRSY (SEQ ID NO:262).

105. (New) The method of claim 31, in which the protein is not more than 50 amino acids in length and includes, positioned anywhere along its sequence, the contiguous amino acid sequence of: RVRS (SEQ ID NO:263) or SVRSGCGFRGSS (SEQ ID NO:264) or SVRGGCGAHSS (SEQ ID NO:265).

106. (New) The method of claim 100, 101, 102, 103, 104, or 105, wherein the protein is not more than 40 amino acids in length.

107. (New) The method of claim 100, 101, 102, 103, 104, or 105, wherein the protein is not more than 30 amino acids in length.

108. (New) The method of claim 100, 101, 102, 103, 104, or 105, wherein the protein is not more than 20 amino acids in length.